linear, recurved style. The fruit is a cone, consisting of imbricated cells, which open longitudinally for the escape of the seed. The seeds are obovate, scarlet, connected to the cone by a thread, which suspends them some time after they have fallen out.

The bark of the Magnolia glauca has a bitter taste, combined with a strong aromatic pungency, which approaches that of *Sassafras* and of the *Acorus calamus*. The aroma resides in a volatile portion, which is probably an essential oil, or a variety of camphor. It is lost from the bark in the dry state, after it has been kept some time. Water distilled from the green bark has its peculiar flavour with an empyreumatic smell. No oil appears on the surface, when the experiment is conducted in the small way. The dried bark affords a little resin, and more of a bitter extractive substance. Chalybeate tests produce a very slight darkening of the green colour of the decoction, but gelatin occasions no change. This might be anticipated from the little taste of astringency in the bark.

As a medicinal article, the Magnolia is to be considered an aromatic tonic, approaching in its character to Cascarilla, Canella, and articles of their class. Considered simply in regard to its tonic

powers, it is probably of a secondary order, though from the additional properties which it possesses of a warm stimulant and diaphoretic is found useful in certain disorders. Chronic rheumatism is one of the diseases in which it exhibits most efficacy. Not only the bark, but the seeds and cones which are strongly imbued with the sensible qualities of the tree, are employed in tincture with very good success in this disease.

In intermittent and remittent fevers the Magnolia is one of the many tonics which have been resorted to for cure by the inhabitants of the marshy countries where they prevail. Sufficient testimony has been given in favour of the bark of this tree, to warrant a belief that it is fully adequate to the removal of fever and ague, when administered like the Cinchona, in liberal quantities between the paroxysms. In the more continuous forms of fever of the typhoid type, it has also received the commendations of physicians.

Several other species of Magnolia resemble the present very closely in their sensible properties, and as far as experiments have been tried, they are similar in their medicinal effects. In order to secure the whole efficacy residing in these trees, a tincture should be made from the bark or cones while green or very recently dried, before their more volatile parts have escaped.

JACOB BIGELOW *American Medical Botany* BOSTON, 1817-1820 CARY GRAPHIC ARTS COLLECTION, ROCHESTER INSTITUTE OF TECHNOLOGY Octavo